

REMARKS

Claims 1 through 75 are currently pending in the application.

Claims 1 through 31, 37 through 65 and 71 through 75 are withdrawn from consideration as being directed to a non-elected invention.

Claims 32 through 36 and 66 through 70 currently stand rejected.

This amendment is in response to the Office Action of May 14, 2003.

Claims 32 through 36 and 66 through 70 are rejected as being anticipated by Ishiwata et al. (U.S. Patent 6,102,023).

Claims 32, 33, 35, 66, 67 and 69 are rejected under 35 U.S.C. § 102(b) as being anticipated by Farnworth (U.S. Patent 6,112,735).

Claims 34, 36, 68 and 70 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Farnworth (U.S. Patent 6,112,735) in view of Ishiwata et al. (U.S. Patent 6,102,023).

After carefully considering the cited prior art, the rejections, and the Examiner's comments, Applicants have amended claims 32 and 66 such that the claimed invention is clearly distinguished over the cited prior art.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Currently pending independent claims 32 and 66 have been amended. With respect to the rejection of Claims 32 through 36 and 66 through 70 are as being anticipated by Ishiwata, Applicants respectfully submit that Ishiwata fails to describe each and every element of Applicants' presently claimed invention in the same identical detail as set forth in the presently amended claims. Ishiwata does not describe, either expressly or inherently, the presently claimed element of the invention calling for "providing a chuck having at least one cutting pedestal located thereon"... having "at least one of said pedestals partially supports a portion of said substrate." Applicants discloses the use of one or more "cutting pedestals." Ample support for the requirement that the pedestals provide support to portions of the board can be found in

Applicants' specification at paragraphs [0040] through [0042] and illustrated in drawing Fig. 8. In particular, the pedestals enable the semiconductor substrate or wafer to be cut along lines which are not directly overlying a surface. Ishiwata, in contrast, discloses only, at most, a table 11. FIG.S 3 and 4. The table clearly underlies and supports the entire "workpiece." FIG.S 3, 4, 9A-9C, 11A-11C, 13A-13C and 15A-15C.

Furthermore, Ishiwata fails to describe, either expressly or inherently, a "chuck." In fact, there is no disclosure concerning a device for aligning and immobilizing the substrate upon the table. Applicant, in contrast, clearly discloses an element on top of a table for placing and securing a substrate to be worked. Specification, paragraphs [0040]-[0044], drawing .Figs. 5, 6, 7, 8, 13 and 14. Applicants thus respectfully submit that presently amended independent claims 32 and 66 are allowable. Claims 33 and 67 are also allowable as Ishiwata fails to disclose the application of a vacuum in order to immobilize a substrate. Claims 34 through 36 and 68 through 70 are respectfully deemed allowable as depending from allowable independent claims.

With respect to the rejection of Claims 32, 33, 35, 66, 67 and 69 are under 35 U.S.C. § 102(b) as being anticipated by Farnworth, Applicants respectfully submit that Farnworth fails to anticipate Applicants' claims because the reference does not disclose pedestals partially supporting a substrate as required by Applicants' claims. Farnworth is essentially a method of fully supporting a substrate on a porous chuck. Col. 2, lines 34-62; Figures 1 and 2. It is clear that the substrate is fully supported because 1) each piece of the substrate being singulated is held in place until the entire wafer has been singulated, and 2) the surface of the chuck is continuous. Col. 6, lines 1-12. Applicants respectfully submit that presently amended independent claims 32 and 66 are allowable with claims 33, 35, 67 and 69 being allowable as depending from allowable independent claims.

Claims 34, 36, 68 and 70 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Farnworth in view of Ishiwata. Applicant respectfully submits that claims 34, 36, 68 and 70, being allowable as depending from allowable independent claims, are also allowable with their respective additional limitations.

Applicants very respectfully submit that Farnworth (U.S. Patent 6,112,735) is not properly prior art under 102 (e) because Farnworth was allowed prior to the filing date of the

present Application. However, it may be considered prior art under 102 (a), and thus nevertheless necessitates a response.

Applicants submit that to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Third, the cited prior art reference must teach or suggest all of the claim limitations. Furthermore, the suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure.

First, Farnworth does not suggest its augmentation with the multiple saws of Ishiwata, and Ishiwata does not suggest the combination of its table and sawing apparatus with the porous chuck of Farnworth to establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the presently claimed invention.

Furthermore, the cited prior art combination fails to teach or suggest all of the limitations of Applicants' claims as amended to establish a *prima facie* case of obviousness under 35 U.S.C. § 103. At the very least, the claim limitation which is not taught by the combination of the cited prior art calls for "supporting at least one semiconductor device on a portion of the chuck such that at least one of said pedestals partially supports a portion of said substrate." As set forth above, Farnworth is a porous chuck which supports the entire wafer, while Applicants' claims teach regions of unsupported substrate.

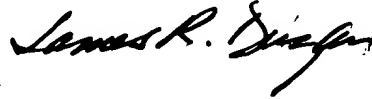
Applicants submit that Farnworth's porous chuck allows minimal damage in situations in which the saw blades to cut into the chuck. Col. 2, lines 34-43. It should be noted that with the porous chuck of Farnworth, the lines along which singulation occurs are over the continuous surface of the chuck. However, the unsupported substrate areas of Applicants' invention allow for cutting through the substrate with a saw without damaging the saw. Applicants respectfully submit that claims 34, 36, 68 and 70 are allowable.

Applicants respectfully submit that claims 32 through 36 and 66 through 70 are clearly allowable over the cited prior art.

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Applicants request the allowance of claims 32 through 36 and 66 through 70 and the case passed for issue.

Respectfully submitted,



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